U.S. Appln. No. 09/749,345
Reply to Office Action dated September 28, 2007

Patent
450100-02918

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A speech synthesizing apparatus comprising:

behavior-state changing means, responsive to a behavior event, for changing a behavior state of the apparatus according to a behavior model;

text generating means for generating text in response to said behavior event;

emotion-state changing means for changing an emotion state of the apparatus according to an emotion model;

selecting means for selecting control information according to the behavior state and/or the emotion state;

substituting means, having a number of word substitute dictionaries, for substituting a word or words included in the text with a word or words from the number of word substitute dictionaries in accordance with pre-programmed personality information,

wherein said pre-programmed personality information includes a plurality of factors,

wherein the plurality of factors included in the pre-programmed personality information used in substituting a word or words included in the text with a word or words from the number of word substitute dictionaries comprise behavioral and emotional state factors,

wherein a substitute dictionary is selected from a plurality of substitute dictionaries as a function of the plurality of factors; and

U.S. Appln. No. 09/749,345
Reply to Office Action dated September 28, 2007

Patent
450100-02918

synthesizing means for synthesizing a speech signal corresponding to the text according to speech synthesizing information included in the control information selected by the selecting means;

accumulating means for accumulating a number of times the behavior-state changing means changes behavior states of the apparatus and/or the number of times the emotion-state changing means changes emotion states of the apparatus, and

wherein the selecting means selects the control information also according to the number of times accumulated by the accumulating means,

wherein a voice of said speech synthesizing apparatus is a function of said speech synthesizing information and said pre-programmed personality information.

2. (Previously Presented) A speech synthesizing apparatus according to Claim 1, wherein the speech synthesizing information includes one or more of the following items:

a segment-data ID, a syllable-set ID, a pitch parameter, a parameter of the intensity of accent, a parameter of the intensity of phrasify, or an utterance-speed parameter.

3. (Original) A speech synthesizing apparatus according to Claim 1, further comprising detecting means for detecting an external condition,

wherein the selecting means selects the control information also according to the result of detection achieved by the detecting means.

4. (Original) A speech synthesizing apparatus according to Claim 1, further comprising:

holding means for holding individual information, and

wherein the selecting means selects the control information also according to the individual information held by the holding means.

5. (Original) A speech synthesizing apparatus according to Claim 1, further comprising:

counting means for counting the elapsed time from activation, and

wherein the selecting means selects the control information also according to the elapsed time counted by the counting means.

6. (Cancelled)

7. (Previously Presented) A speech synthesizing apparatus according to Claim 1, wherein the personality information is included in the control information selected by the selecting means.

8. (Original) A speech synthesizing apparatus according to Claim 1, further comprising:

converting means for converting the style of the text according to a style conversion rule corresponding to selection information included in the control information selected by the selecting means.

9. (Original) A speech synthesizing apparatus according to Claim 1, wherein the speech synthesizing apparatus is a robot.

10. (Currently Amended) A speech synthesizing method for a speech synthesizing apparatus comprising:

a behavior-state changing step, responsive to a behavior event, of changing a behavior state of the apparatus according to a behavior model;

a text generating step of generating text in response to said behavior event;

an emotion-state changing step of changing an emotion state of the apparatus according to an emotion model;

a selecting step of selecting control information according to the behavior state and/or the emotion state; ~~and~~

a substituting step of substituting a word or words included in the text with a word or words from a number of word substitute dictionaries in accordance with pre-programmed personality information,

wherein said pre-programmed personality information includes a plurality of factors,

wherein the plurality of factors included in the pre-programmed personality information used in substituting a word or words included in the text with a word or words from the number of word substitute dictionaries comprise behavioral and emotional state factors,

selecting a substitute dictionary from a plurality of substitute dictionaries as a function of the plurality of factors; and

a synthesizing step of synthesizing a speech signal corresponding to the text according to speech synthesizing information included in the control information selected by the process of the selecting step;

an accumulating step for accumulating a number of times the behavior-state changing step changes behavior states of the apparatus and/or the number of times the emotion-state changing step changes emotion states of the apparatus, and

wherein the selecting step selects the control information also according to the number of times accumulated by the accumulating step,

wherein said speech signal is a function of said speech synthesizing information and said pre-programmed personality information.

11. (Currently Amended) A computer readable storage medium ~~for storing a computer program, the program comprising:~~ encoded with a computer program that when executed by a computer causes the computer to:

~~a behavior-state changing step, responsive to a behavior event, of changing~~ change a behavior state of the apparatus according to a behavior model, responsive to a behavior event;

~~a text generating step of generating~~generate a text in response to said behavior event;

~~an emotion-state changing step of changing~~ change an emotion state of the apparatus according to an emotion model;

~~a selecting step of selecting~~ select control information according to the behavior state and/or the emotion state;

~~a substituting step of substituting~~substitute a word or words included in the text with a word or words from a number of word substitute dictionaries in accordance with pre-programmed personality information,

wherein said pre-programmed personality information includes a plurality of factors,

wherein the plurality of factors included in the pre-programmed personality information used in substituting a word or words included in the text with a word or words from the number of word substitute dictionaries comprise behavioral and emotional state factors,

wherein a substitute dictionary is selected from a plurality of substitute dictionaries as a function of the plurality of factors; and

U.S. Appln. No. 09/749,345
Reply to Office Action dated September 28, 2007

Patent
450100-02918

~~a synthesizing step of synthesizing~~synthesize a speech signal corresponding to the text according to speech synthesizing information included in the control information selected by the process of the selecting step;

accumulate a number of times the behavior-state changing step changes behavior states of the apparatus and/or the number of times the emotion-state changing step changes emotion states of the apparatus, and

wherein the selecting step selects the control information also according to the number of times accumulated by the accumulating step,

wherein said speech signal is a function of said speech synthesizing information and said pre-programmed personality information.

12. (Previously Presented) The speech synthesizing apparatus according to claim 1, wherein the personality information is representative of one or more of the following items: type, gender, age, temperament, or physical condition.

13. (Previously Presented) The method according to claim 10, wherein the personality information is representative of one or more of the following items: type, gender, age, temperament, or physical condition.

14. (Currently Amended) The computer readable storage medium <u>encoded with a computer program executed by a computer</u> ~~for storing a computer program~~ according to claim 11,

wherein the personality information is representative of one or more of the following items: type, gender, age, temperament, or physical condition.